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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,102	03/26/2001	Rabindranath Dutta	AUS920010044US1	7737
65362 7590 02/19/2009 HAMILTON & TERRILE, LLP IBM Austin P.O. BOX 203518 AUSTIN, TX 78720				
EXAMINER ZIA, SYED				
ART UNIT 2431		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/817,102

Applicant(s)

DUTTA ET AL.

Examiner

SYED ZIA

Art Unit

2431

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date: \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

In view of the Appeal Brief filed on November 22, 2008, PROSECUTION IS  
HEREBY REOPENED. A new ground of rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following  
two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37  
CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an  
appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee  
can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have  
been increased since they were previously paid, then appellant must pay the difference between  
the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing  
below:

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2436

***Response to Arguments***

1. Applicant's arguments filed on November 22, 2008 have been fully considered but they are moot in view of new ground of rejection:

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-30 are rejected under 35 U.S.C. 101 based on Supreme Court precedent and recent Federal Circuit decisions, a 35 U.S.C § 101 process must (1) be tied to a particular machine or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In re Bilski et al, 88 USPQ 2d 1385 AFCE (2008); Diamond v. Diehr, 450 U.S. 175, 184 (1981); Parker v. Flook, 437 U.S. 584, 588 n.9 (1978); Gottschalk v. Benson, 409 U.S. 63, 70 (1972); Cochrane v. Deener, 94 U.S. 780,787-88 (1876).

An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the particular machine to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Here, applicant's method steps are not tied to a particular machine and do not perform a transformation. Thus, the claims are non-statutory.

The mere recitation of the machine in the preamble with an absence of a machine in the body of the claim fails to make the claim statutory under 35 USC 101. *Note the Board of Patent Appeals Informative Opinion Ex parte Langemyer et al.*

Claims 16-30 are rejected under 35 U.S.C. 101 as directed to non-statutory subject matter of software, per se. The claim lacks the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 U.S.C. 101. It is clearly not a series of steps or acts to be a process nor is it a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. It is at best, function descriptive material per se. For computer readable media to be statutory, it first needs to be computer-readable storage medium. Recording media, receivable media, or the like, covers signals as well as physical storage medium such as memory. Secondly, it needs to stores or embody a program executed by a computer, causing the computer to perform the steps of the claim.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are non-statutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming non-functional descriptive material, i.e., abstract ideas, and computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”). See MPEP 2106.01 [R-6].

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim 1-38 is rejected under 35 U.S.C. 102(e) as being anticipated by Blais et al. (U. S. Patent 6,918,126).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

2. Regarding Claim 1 Blais teaches a process for restricting access an object-oriented method within a data processing system, the process (Fig.4-8, 14) comprising:

initiating a call to the object-oriented method from a; determining whether an invocation of the object-oriented method has been restricted with an object-oriented enforcement construct ; in response to a determination that access the object-oriented method has been restricted with an object-oriented enforcement construct, performing an authorization process to determine whether the requester is authorized to invoke the object-oriented method ; and in response a determination that the requester is authorized to invoke the object-oriented method, invoking the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

3. Regarding Claim 9 Blais teach a process for restricting access to an object-oriented method within a data processing system (Fig.4-8, 14), the process comprising:

editing a source code statement that defines object-oriented method within a source code file ; and modifying the source code file to include an enforcement construct, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process and a reserved word to be recognized by a compiler as requiring runtime

execution of the authorization process, prior to invoking the object-oriented method, to determine whether an entity is authorized to invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

4. Regarding Claim 12 Blais teach a process for restricting access to an object-oriented method within data processing system(Fig.4-8, 14), the process comprising:

compiling source code that defines the object-oriented method within a source code file; and compiling source code that defines an enforcement construct, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process and a reserved word to be recognized by compiler as requiring runtime execution of the authorization process, prior invoking the object-oriented method, to determine whether an entity is authorized to invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

5. Regarding Claim 15 Blais teach a process of restricting invocation of an object-oriented method within a data processing system(Fig.4-8, 14), the process comprising:

identifying the object-oriented method within a data structure; and



associating an object-oriented enforcement construct with the object-oriented method, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process that is to be executed, prior to invoking the object-oriented method, to determine whether an entity is authorized to invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

6. Regarding Claim 16 Blais teach a computer program product in a computer-readable medium for use within a data processing system for restricting access to an object-oriented method, the computer program product (Fig.4-8, 14) comprising:

instructions for initiating a call to the object-oriented method from a requester; instructions for determining whether an invocation of the object-oriented method has been restricted with an object-oriented enforcement construct; instructions for performing, in response to a determination that access to the object-oriented method has been restricted with an object-oriented enforcement construct, an authorization process to determine whether the requester is authorized to invoke the object-oriented method; and instructions for invoking, in response to a determination that the requester is authorized to invoke the object-oriented method, the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

7. Regarding Claim 24 Blais teach a computer program product in a computer-readable medium for use within a data processing system to generate source code for restricting access to an object-oriented method, the computer program product (Fig.4-8, 14) comprising:

instructions for editing a source code statement that defines the object-oriented method within a source code file; and instructions for modifying the source code file to include an enforcement construct, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process and a reserved word to be recognized by compiler as requiring runtime execution of the authorization process, prior to invoking the object-oriented method, to determine whether an entity is authorized invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

8. Regarding Claim 27 Blais teach a computer program product a computer-readable medium for use within a data processing system to generate executable code for restricting access an object-oriented method, the computer program product comprising: instructions for compiling source code that defines the object-oriented method within a source code file ; and instructions for compiling source code that defines an enforcement construct, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process and a reserved word to be recognized by a compiler as requiring runtime

execution of the authorization process, prior to invoking the object-oriented method, to determine whether an entity is authorized to invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

9. Regarding Claim 30 Blais teach a computer program product in a computer-readable medium for use within a data processing system for restricting invocation of an object-oriented method, the computer program product (Fig.4-8, 14) comprising: instructions for identifying the object-oriented method within a data structure; and instructions for associating an object-oriented enforcement construct with the object-oriented method, wherein the enforcement construct comprises an authorization process identifier associated with an authorization process that is to be executed, prior to invoking the object-oriented method, to determine whether an entity is authorized to invoke the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

10. Regarding Claim 31 Blais teach an apparatus for restricting access an object-oriented method within a data processing system, the apparatus (Fig.4-8, 14) comprising: means for initiating a call to the object-oriented method from a requester; means for determining whether an invocation of the object-oriented method has been restricted with an object-oriented

enforcement construct; means for performing, in response to a determination that access to the object-oriented method has been restricted with an object-oriented enforcement construct, an authorization process to determine whether the requester is authorized to invoke the object-oriented method; and means for invoking, in response to a determination that the requester is authorized to invoke the object-oriented method, the object-oriented method wherein an instruction to enforce said object-oriented enforcement construct is embedded in compiled source code and said source code is stored in a computer-readable medium (col.7 line 37 to col.8 line 22, col.9 line 23 to col.11 line 8, and col.11 line 9 to col.12 line 22).

5. Claims 2-8, 10-11, 13-14, 17-23, 25-26, 28-29, and 32-38 are rejected applied as above in rejecting Claims 1, 9, 12, 16, 24, 27, and 31. Furthermore, the system of Blais teaches and describes an object-oriented access control method for protected elements (Fig.1-10), comprising:

As per Claim 2, 17, and 32 in response to a determination that the requester is not authorized to invoke the object-oriented method, returning an error response to the requester for the call to the object-oriented method (col.10 line 8 to line 25).

As per Claim 3, 18, and 33 identifying the authorization process that is associated with the object-oriented method (col.9 line 35 to col.10 line 25).

As per Claim 4, 19, and 34 obtaining identity information associated with the requester; and passing the identity information associated with the requester to the authorization process (col.9 line 35 to col.10 line 25).

As per Claim 5, 20, and 35 the authorization process is performed by invoking an authorization method (col.11 line 24 to col.12 line 11).

As per Claim 6, 21, and 36 analyzing runtime environment information in order to determine whether an invocation of the object-oriented method has been restricted with an object-oriented enforcement construct (col.11 line 9 to col.12 line 37).

As per Claim 7, 22, and 37 the invocation of the object-oriented method has been restricted with an object-oriented enforcement construct applied at a method level in a source code statement for the object-oriented method (col. 9 line 53 to col.11 line 8, and col.11 line 9 to col. 12 line 37).

As per Claim 8, 23, and 38 the invocation of the object-oriented method has been restricted with an object-oriented enforcement construct applied at a class level a source code statement for a class that includes the object-oriented method (col.9 line 53 to col.11 line 8).

As per Claim 10, 13, 25, and 28 the enforcement construct is included in a source code statement that defines the object-oriented method (col. 9 line 53 to col.11 line 8, and col.11 line 9 to col. 12 line 37).

As per Claim 11, 14, 26, and 29 the enforcement construct is included in a source code statement that defines a class that includes the object-oriented method (col. 9 line 53 to col.11 line 8, and col.11 line 9 to col. 12 line 37).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED ZIA whose telephone number is (571)272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sz  
February 10, 2009  
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Primary Examiner, Art Unit 2431